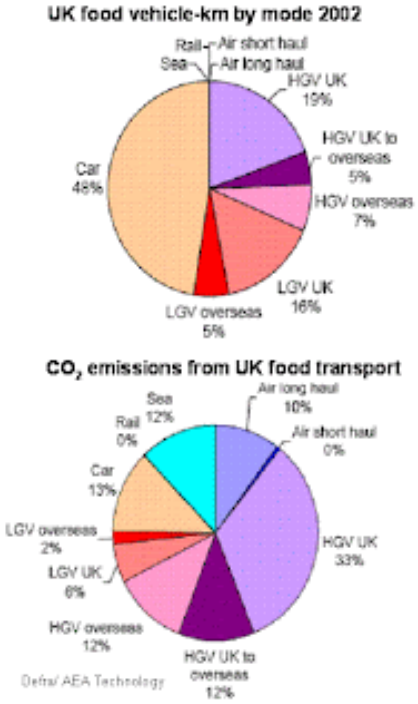
Food miles… wrong idea, stop using it!

written by Clive Bates | 25 February 2007



I do occasionally enjoy an early morning BLT sandwich at Paddington station *en route* to the Bristol head office of my employer – a small comfort before what inevitably lies ahead. But imagine my horror to be informed that the humble bacon, lettuce and tomato sandwich may have 31,000 "food miles" embodied in it (and much more besides) – see Ecologist article here. *Horreur!*

This is one of the more nonsense applications of the concept of food miles – for example, it turns out that 5,961 of these ecologically destructive miles were accounted for by the yeast that would be used to make the bread…! Presumably a single freight container of yeast shipped by sea would keep the UK in bread for months and have minimal environmental impact. This is a bit of a weakness in the food miles concept, isn't it…? Especially when applied to specific products that may have only tiny quantities of ingredients shipped many miles. Many of the international food miles are done in bulk by container ships that have very low economic and environmental costs per kilogram-kilometre of freight movement.

What's the real story…? It might be more interesting to look at the whole food chain – see charts (left) from an assessment by AEA Technology for Defra: *The Validity of Food Miles as an Indicator of Sustainable Development* (the Exec summary is well worth a read). Here we see that the *food miles* (measured by vehicle-kms) are dominated by the car – people going to and from stores to buy food. But the *carbon dioxide emissions* are dominated by the heavy goods vehicles within the UK – the elaborate logistics system that supplies the shops. Looking

further, AEA-T estimates the 'social cost' – ie. all external costs associated with food transport, finding that this is dominated by *congestion and accidents* (rather than CO2) and the impact of the car is again the greatest – see extract here.

What about other energy use and inputs? Other critiques have asked why the focus should be on transportation, and not on the full production cost… researchers from Lincoln University Agribusiness and Research Economics Unit in New Zealand showing that transport from that far-off land mattered less than the fertiliser inputs and other costs of farming and food production [see here]. It concludes:

> *This report has shown that in the case of dairy and sheepmeat production NZ is by far more energy efficient even including the transport cost than the UK, twice as efficient in the case of dairy, and four times as efficient in case of sheepmeat. In the case of apples NZ is more energy efficient even though the energy embodied in capital items and other inputs data was not available for the UK. In the case of onions, the UK is more energy efficient in production than NZ. However, when storage costs are included for UK onions to replace imports from NZ the UK is less energy efficient than NZ.*

Food miles are useless. There is no doubt that transport intensity in the food supply system has been increasing – driven by forces of globalisation, consolidation in retailing, larger shops with more choice meeting demand for year-round supply, car-based shopping etc. But "food miles" are barely useful in capturing or articulating any of this interesting complexity. The Stern Review got in a jam over the food miles for New Zealand kiwi fruit … allegedly claiming that 1kg of fruit caused 5kg of emissions if air freighted (I say allegedly, because I can't find this – but it illustrates the point). But the environmental impact depends on whether they are freighted by sea or air – see furious accusations of environmental protectionism at the Stern alleged gaff… see *Alarm erupts over climate tax on trade* / *Fuelling the myths around food miles*. Same sort of thing applies to the impact of food miles on attempts to promote fair trade and implications for development through trade – see *Eliminating Poverty: making globalisation work for the poor* DFID's 2000 globalisation white paper.

Interesting development… More useful will be the fruits of research into carbon footprints – such as the new approach by supermarket giant Tesco to label

all its products with a measure of its embodied carbon footprint and to fund an institute to help it do it [chief executive's speech / Oxford Sustainable Consumption Institute / sceptical Guardian review].